Attachment IV-2

Stabilization Reagent List (Typical)

Commonly Used Stabilization Reagents

Pozzolanic Materials

Cement

Cement Kiln Dust Flyash (Class F & C)

Lime

Lime Kiln Dust Sodium Silicate

Zeolites (Aluminum Silicates)

Metabond Enviroblend Envirobond

Oxidizers/Reducers

Aluminum Hydroxi Chloride Ammonium Phosphate Ammonium Sulfate Calcium Hypochlorite Copper Sulfate

Ferrous Ammonium Sulfate

Ferrous Nitrate

FeSO₄ (Ferrous Sulfate) Green Phosphate Hydrogen Peroxide

Nonoxinol-9

Potassium Permanganate

Potassium Phosphate (Monobasic)

Sodium Hydrosulfite Sodium Hypochlorite Sodium Metabisulfite Sodium Percarbonate Sodium Poly Phosphate Thio-red

pH Adjustment

Ammonium Hydroxide Calcium Sulfate (Anhydrous) Sodium Hydroxide Sulfuric Acid

Precipitation/Flocculants

Ammonium Sulfate

Anionic-Cationic Flocculants

Calcium Chloride
Calcium Sulfate
Cellulose Xanthate
Colloidal Silicon Dioxide

Ferric Oxide

Ferrous Oxide

Ferrous Sulfate Heptahydrate

Sodium Aluminate Sodium Carbonate Starch Xanthate Calcium Polysulfide

Sodium Dimethyldithiocarbamate

Absorbents/Binding Agents

Carbon

Chembond (Modified Clay) Liqui-Set (Modified Clay) Liquibond (Modified Clay)

Wetting Agents/Dispersants/Chelating Agents/Solvents (to enhance mixing and reactions)

Methanol Water

Other

Aluminum Chips Brass Chips Sand Iron Chips Salt Water Sulfur

Attachment IV-2 Typical Stabilization Reagent List Safety-Kleen (Lone and Grassy Mountain), Inc. Grassy Mountain Facility State-Issued Part B Permit; April 20, 2001

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Special Additions/Other Usages

CAS 77-92-9 Citric Acid For: Chelating Agent Ferric Chloride CAS 7705-08-0 For: Reducing Agent Sodium Meta Silicate CAS 6834-92-0 For: Volume reduction and metal fixation Aluminum Oxide CAS 1344-28-1 For: Cement strengthening and metal fixation **Cupric Nitrate** CAS 3251-23-8 For: Oxidizer Catalyst Copper Bromide CAS 7789-45-9 For: Oxidizer Catalyst Copper Sulfate CAS 7758-98-7 For: Oxidizer Catalyst Sodium Peroxide CAS 1313-60-6 For: Oxidizer Calcium Peroxide CAS 1305-79-9 For: Oxidizer Sodium Persulfate CAS 7775-27-1 For: Oxidizer Various Surfactant Mixture/Blends NO CAS AVAILABLE: For: Emulsification/Polarity Manufacture Proprietary Adjustment Methanol CAS 67-56-1 For: Polarity adjustment

Isopropyl Alcohol

For: Polarity adjustment

CAS 67-63-0